DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION, CORPS OF ENGINEERS
424 TRAPELO ROAD
WALTHAM, MASSACHUSETTS 02254

NBH
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REPLY TO
ATTENTION OF:

20 March 1987

Operations Division

Mr. Frank Ciavatteri
New Bedford Project Manager
EPA
JFK Federal Building
Boston, MA 02203

Dear Mr. Ciavatteri Frank:

This letter concerns the pilot study proposed for the New Bedford Harbor Superfund Site.

We have evaluated several alternate locations for the confined disposal facility (CDF) due to the poor foundation conditions encountered at the site originally proposed. An outline of the critical features of each site along with a brief discussion of their advantages and disadvantages are included on the attached sheets. Listed below are our recommendations:

1) Location F: This site provides capacity for a sufficient amount of dredged material to allow several types of equipment to be evaluated and will be ongoing for a long enough time period to aquire a considerable amount of information on the impacts of the dredging and disposal operation. The construction costs are also reasonable and we would not anticipate any problems during the construction period that would lead to unexpected delays.

2) Location C: This site also provides capacity for a sufficient amount of dredged material. The construction costs are approximately twice those associated with location F but we would not anticipate any problems during the construction period that would lead to delays.

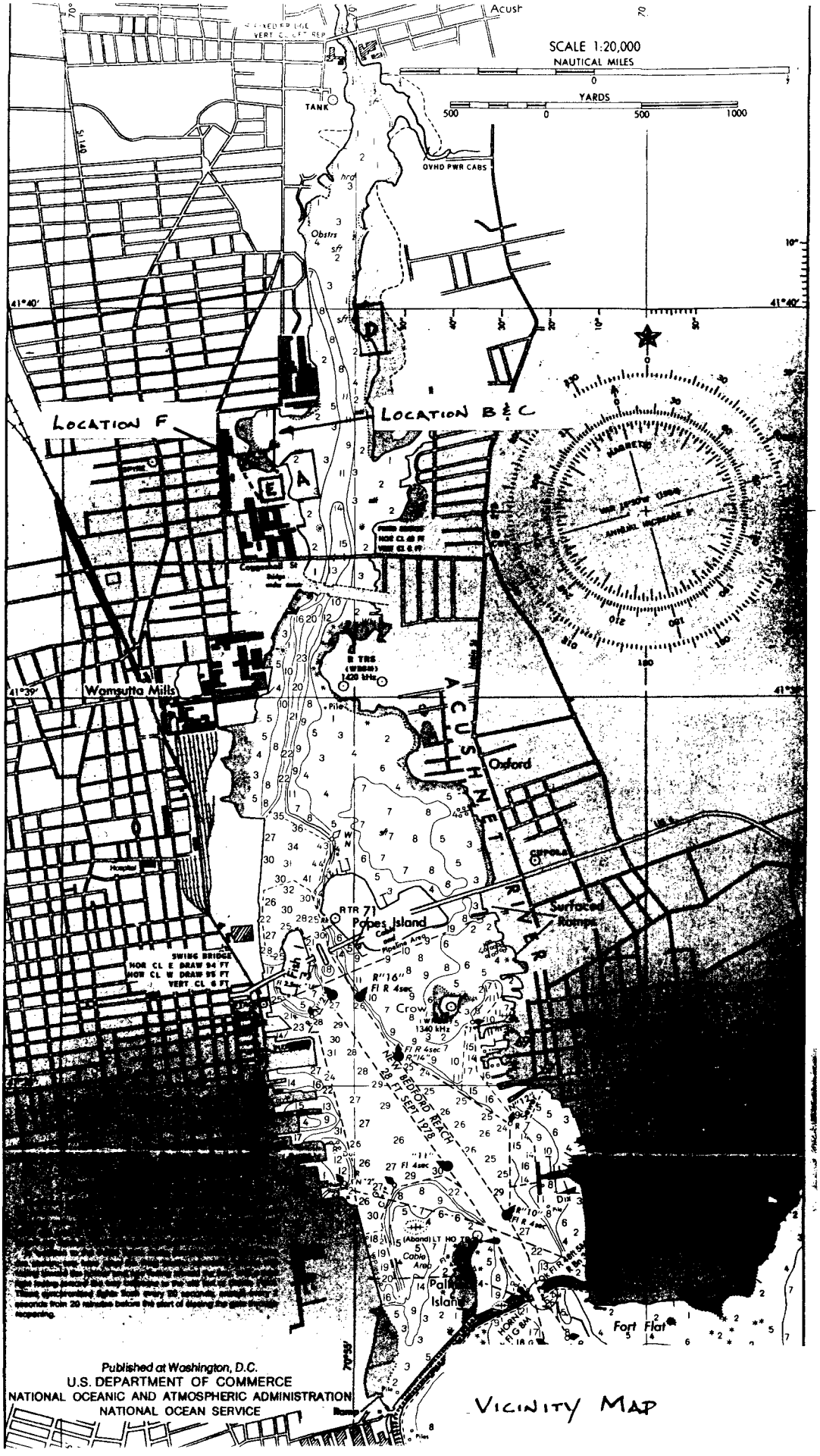
3) Location D: This site is the best choice when considering construction costs and capacity for dredged material. We realize the problems associated with its location on the Fairhaven side of the river may make further consideration of the area unneccessary.

4) Location E: This site is the low cost alternative and offers the possibility of being able to complete the pilot study by the end of the calender year. The drawback is that the amount of dredging is significantly reduced which will limit the amount of usefull information obtained from the study.

Please review this information and let me know how you would like us to proceed. We are available next Tuesday afternoon if you would like to discuss this material prior to Thursdays progress meeting.

Sincerely,

Al Randall
Chief, New Bedford
Project Office



VICINITY MAP

GENERAL NOTES:

1) Additional sampling and testing of subsurface conditions will be required at all sites. The scope and cost of this work can be reduced at the locations noted.

2) The completion date for the pilot study is listed as May 1988 for all locations. The most optimistic schedule shows the CDF being completed at the end of the calender year which would require the dredging work to be done during the winter. Monitoring operations could be seriously disrupted by ice conditions so dredging would likely be delayed until March and April. It is noted when other factors may significantly impact this completion date.

LOCATION A (refer to figure 1)

Description: Fabric reinforced dike, 1700 feet in length constructed off city owned property.
Estimated cost: $2,000,000
Estimated cost of liner: $700,000 Does not include cost of dewatering site.
Length of construction period: 4 months (could be longer if stage construction is required)
Pilot Study completion date: May 1988
Impact on dredging operation: Site will contain 12,500 cy of material
CAD cell will be 280' by 280'.

Summary: Until the results of additional testing of foundation material are available the possibility of stage construction cannot be ruled out. If stage construction is required the completion date for the pilot study would be pushed back to late 1988.

LOCATION B (refer to figure 2)

Description: Fabric reinforced dike, 1000 feet in length constructed across the inner portion of the cove. The dike would meet the shoreline on city property on both sides of the cove.
Estimated cost: $1,300,000
Estimated cost of liner: $1,000,000
Length of construction period: 3 months (could be longer if stage construction is required)
Pilot Study completion date: May 1988
Impact on dredging operation: Site will contain 15,600 cy of material
CAD cell will be 325' by 325'.
Other considerations: This site requires the use of privately owned property along the back side of the cove.

Summary: Until the results of additional testing of foundation material are available the possibility of stage construction cannot be ruled out. If stage construction is required the completion date for the pilot study would be pushed back to late 1988.

LOCATION C (refer to figure 3)

Description: Steel sheet pile wall, 1000 feet in length constructed across the inner portion of the cove. The wall would meet the shoreline on city property on both sides of the cove.

Estimated cost: $2,000,000
Estimated cost of liner: $1,000,000
Length of construction: 4 months
Pilot study completion date:May 1988
Impacts on dredging operation: This site will contain 24,000 cy of material. CAD cell will be 400' by 400'.

Other considerations: This site will require the use of privately owned property along the back side of the cove.

Summary: Additional sampling and testing of foundation materials is required prior to final design of the sheet pile wall. There should be no problems during the construction phase that would delay completion of the project beyond the date listed above. The length of the wall could be reduced by approximately 200 feet if it were to connect to private property on the north side of the cove. This could reduce construction costs by $400,000.

LOCATION D (refer to figure 4)

Description: ~~40,000~~ 99,000 square foot diked area located on the Fairhaven side of the river and to the north of the cove.
Estimated cost: $600,000
Estimated cost of liner: $400,000
Length of construction: 2 months
Pilot study completion date: May 1988
Impacts on dredging operation: Site will contain 18,000 cy of material CAD cell will be 350' by 350'.

Other considerations: Site is on privately owned property in Fairhaven. The area is also a productive marsh.

Summary: Additional sampling and testing would be required prior to final design of the dike. This cost of this site would be considerably less than one built in the cove. The cost of lining this site would also be considerably less.

LOCATION E (refer to figure 5)

Description: 160,000 square foot diked area located on the city owned land just south of the cove.
Estimated cost: $350,000
Estimated cost of liner: $200,000
Length of construction: 2 months
Pilot study completion date: May 1988
Impacts on dredging operation: Site will contain 6,000 cy of material CAD cell will be 200' by 200'.

Other considerations: This plan includes a dike built nine feet above the existing ground elevation in an upland setting. A liner would likely be required.

Summary: The cost and scope of additonal sampling and testing of foundation conditions would be reduced. Construction costs and timeframes are reduced and this alternative could possibly allow the pilot study to be completed this calender year. The amount of dredging would be considerably reduced however, which would limit the amount of information obtained from the study.

LOCATION F (refer to figure 6)

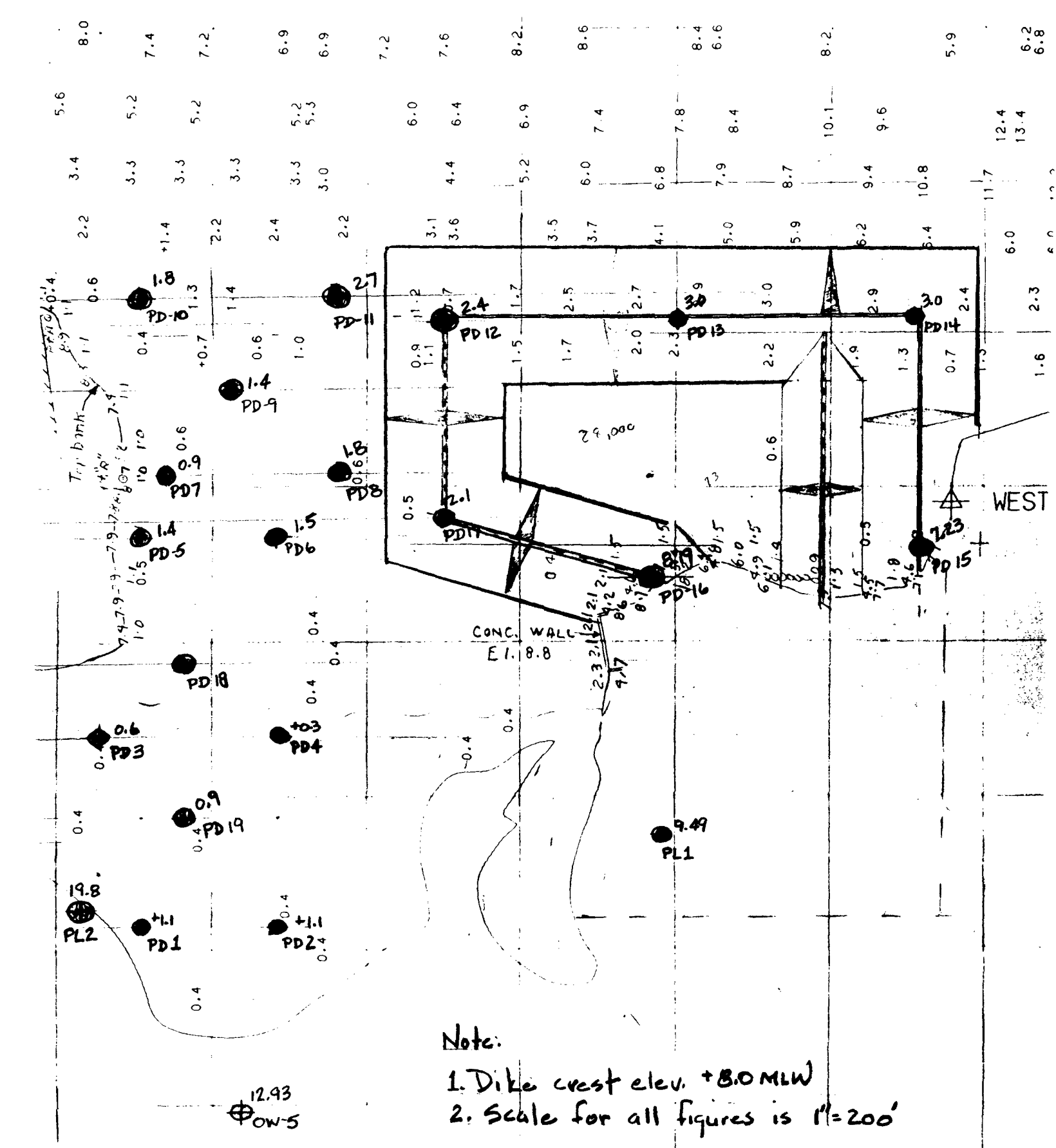
Description: Approximately 275.000 square foot diked area which includes the city park, private property and the southern portion of the cove.
Estimated cost: $1,100,000
Estimated cost of liner: $550,000
Length of construction: 4 months
Pilot study completion date: May 1988
Impacts to dredging operation: Site would contain 25,500 cy of material
CAD site would be 400' by 400'

Other considerations: This site would involve the use of private property. The dike would be built to a height of nine feet above the existing ground elevation in an upland setting.

Summary: There should be no problems with construction that would delay completion of the facility.

The following additional sites were considered:
Description: The area between the Coggshall Street bridge and the I - 195 bridge on the New Bedford side of the harbor.
Summary: The information available on subsurface conditions indicates that conditions in this area are similar to those around the cove. An expensive dike or sheet pile wall would be needed and additional investigations of subsurface conditions would be required so there would be no saving of time. The area is also considerably smaller than the other sites so the amount of dredging would be significantly reduced thereby reducing the amount of information gained from the study. An outfall (surface drainage) discharges into this area. This pipe would have to be extended through the site or moved, further complicating construction.

Description: An area which would include a portion of the city owned park and a dike built offshore.
Summary: Poor subsurface conditions extend right up to the shoreline so any dike built in this area will be expensive and until additional testing is performed, may require stage construction.

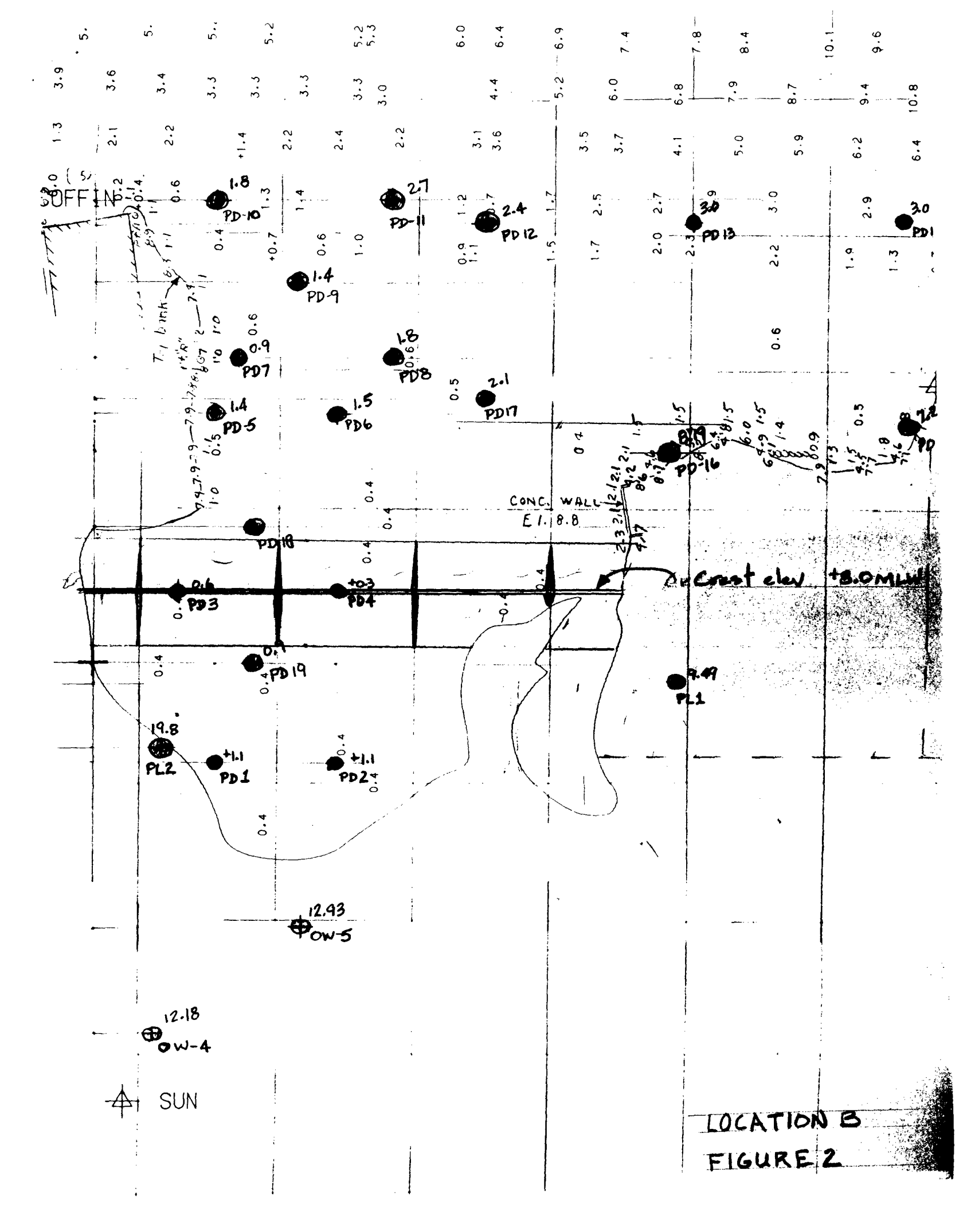


Note:

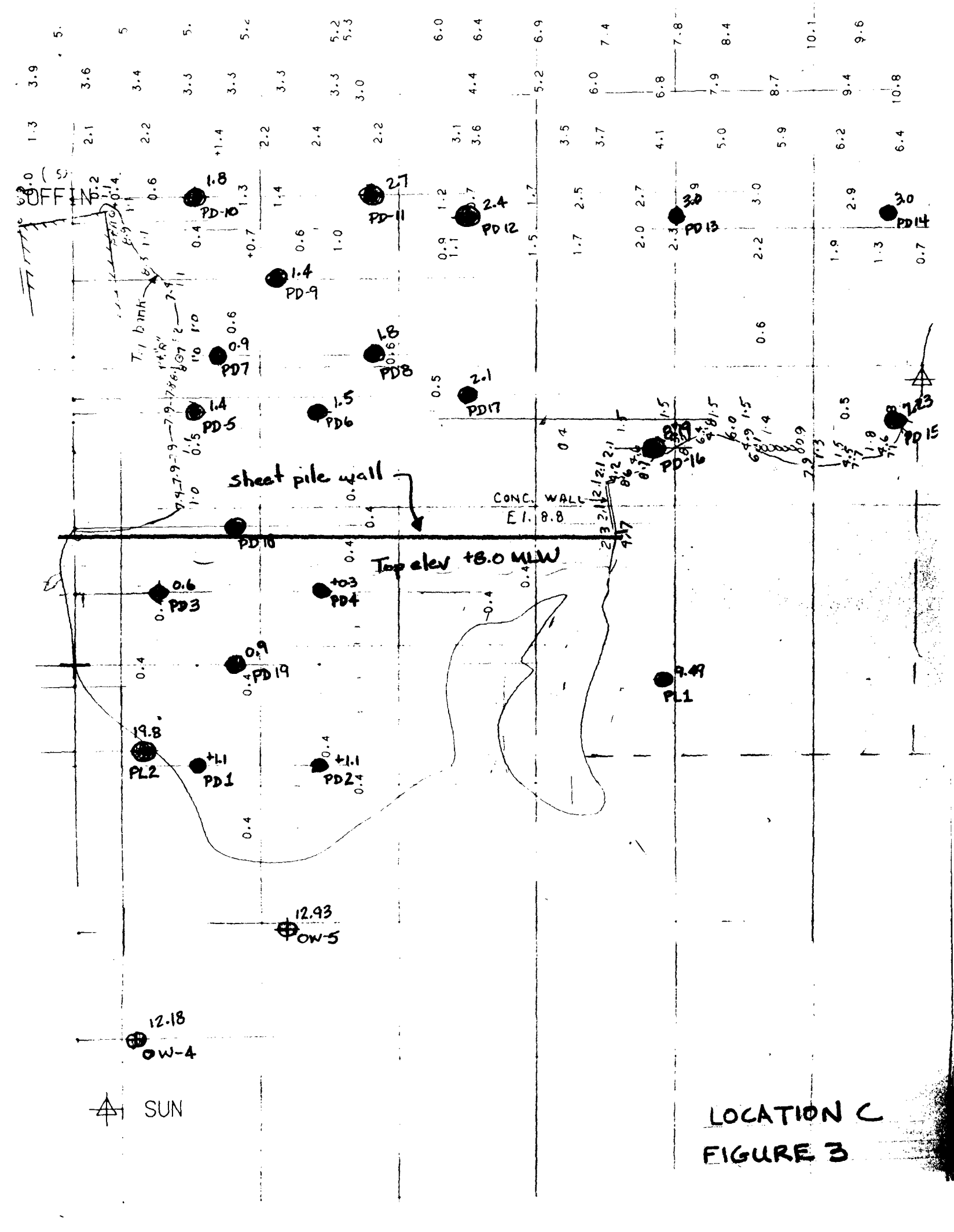
1. Dike crest elev. +8.0 MLW
2. Scale for all figures is 1"=200'

LOCATION A

FIGURE 1

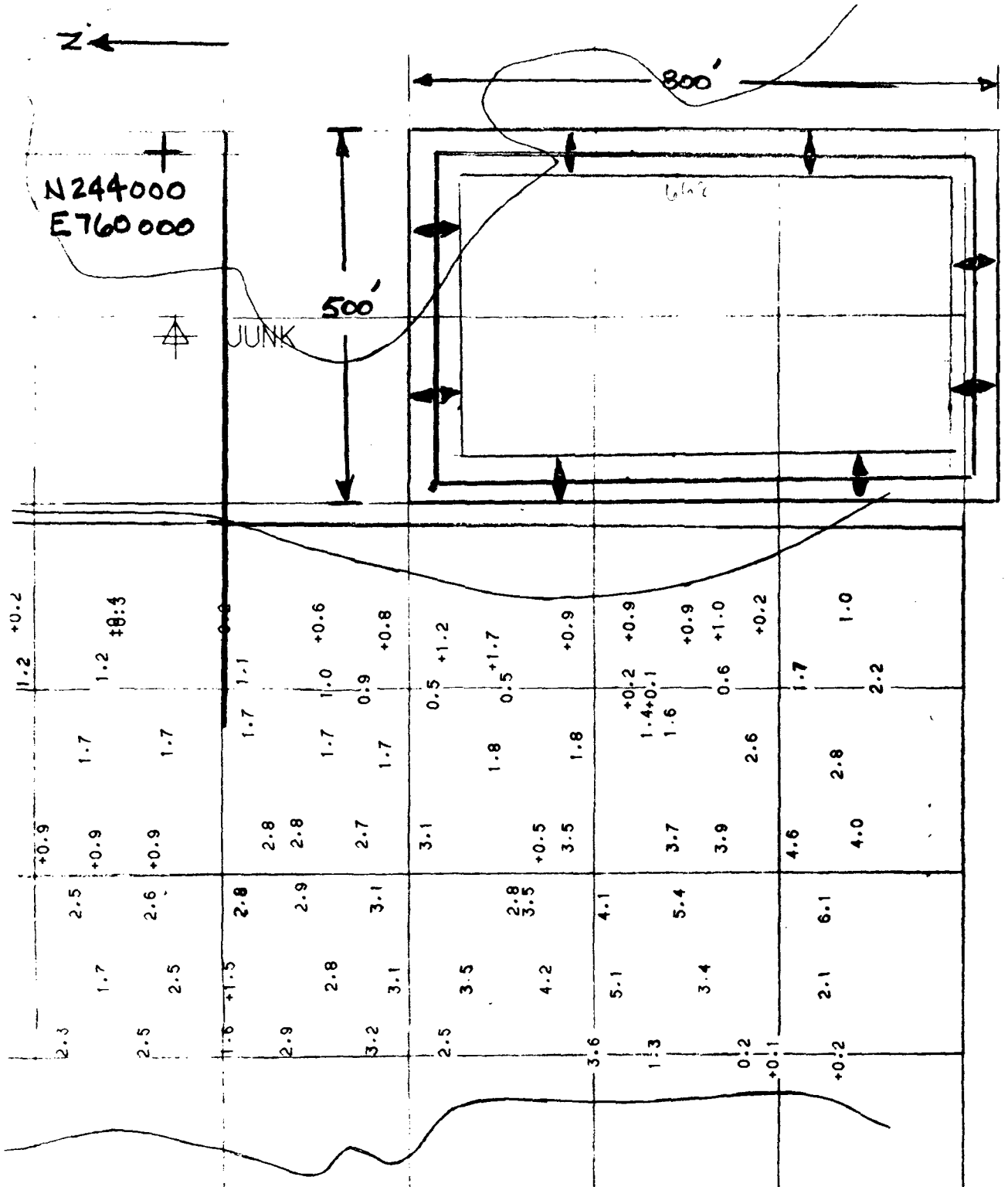


LOCATION B
FIGURE 2



LOCATION C

FIGURE 3



Note:

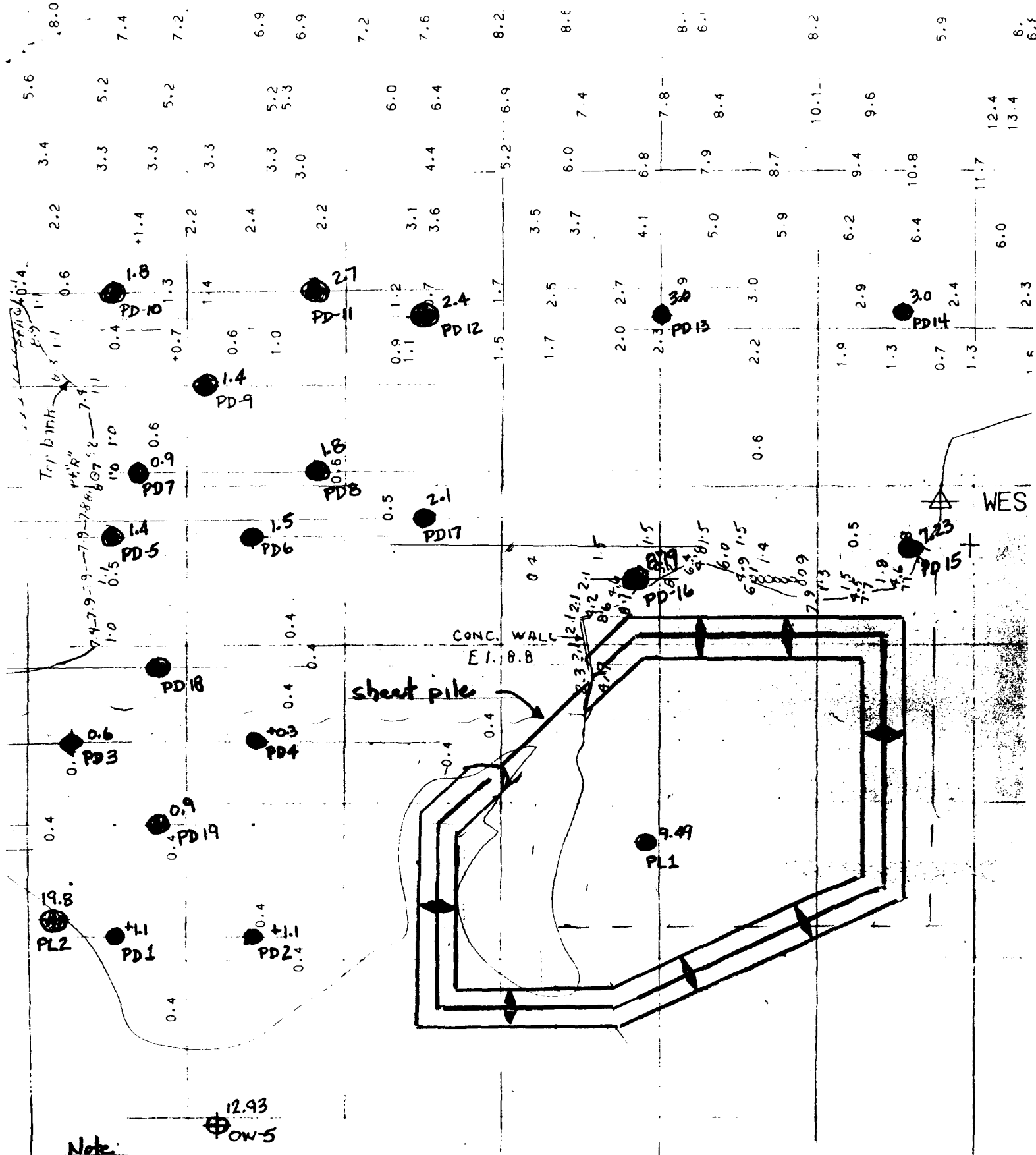
1. Dike crest 9 feet above existing ground elevation

4 MILL

LOCATION D
FIGURE 4

Note: Dike crest 9 feet above existing ground

LOCATION E
FIGURE 5



Note:

Dike crest 9 feet above existing ground elevation

LOCATION F

FIGURE 6